Retention Monitoring System

Overview

- History & Operational Problem
- Proposed solution - *RMS*
- *RMS* Metrics & Capabilities
- Data Characteristics
- Architecture
- System Characteristics
- User Base
- Continuing Work
- Continuing Challenges

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2

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History & Operational Problem

★ **Study commissioned by N13 (BUPERS)**

- **Legacy retention reporting system was/is unsatisfactory**

  - **Limited access to information**

  - **Conflicting measures**

  - **Insufficient data available**

  - **No history**

- **Objective was to propose measures / systems that allow for efficient exchange and analysis of retention statistics**

Proposed Solution

The new ***Retention Monitoring System (RMS)*** - a personnel data repository with reporting and query capability to compute a wide array of standardized retention, reenlistment, and attrition statistics.

RMS Metrics

Reenlistment Rate	Measures EAOS retention behavior	$$\frac{\text{Reenlistments} + \text{LTE}}{\text{Reenlistments} + \text{LTE} + \text{EAOS losses}}$$
Attrition Rate	Measures non-EAOS loss behavior	$$\frac{\text{Non-EAOS losses}}{\text{Non-EAOS inventory}}$$
Retention Rate	Combines reenlistment and attrition rates	$$\frac{\text{Reenlistments} + \text{LTE}}{\text{Reenlistments} + \text{LTE} + \text{all losses}}$$

* Other measures with standard definitions are available as required.

RMS Capabilities

Retention/Reenlistment/Attrition statistics by organizational structure...

All-Navy   TYCOM   Ship class

Fleet   Squadron   UIC

...and by any combination of the following dimensions:

- ★ **Gender**
- **Race/Ethnic**
- **Pay Grade/LOS**
- **Zone/Term**
- **Skill (Rating, EMC)**
- **Sea/Shore Code**

- **Quality (AFQT, Education level)**
- **Marital/Dependency**
- **Geographic Location**
- **Organization**

Data Characteristics

★ Relational database architecture.

☐ Historical data (Enlisted - mid '92).

☐ Structured to facilitate answers to retention questions.

☐ Maintains a high level of fidelity to corporate data source.

Architecture

★ Relational Database
  - Base table storage
  - Views (queries)

▢ Multi-Dimensional Database
  - Cubes
  - On-Line Analytic Processing (OLAP)

▢ Front-end applications
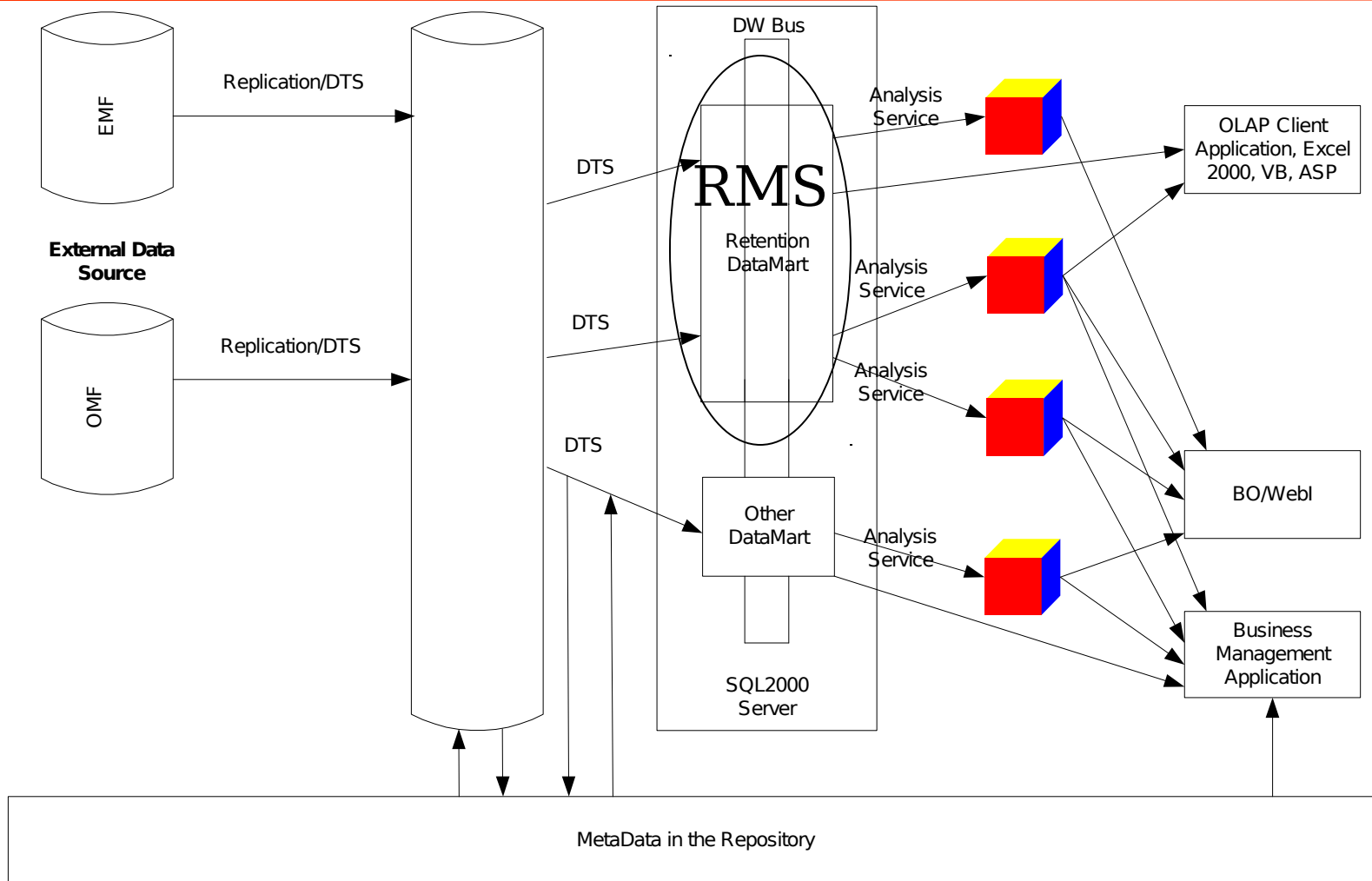 - Business Objects
  - Office Tools (Excel)
  - SPSS
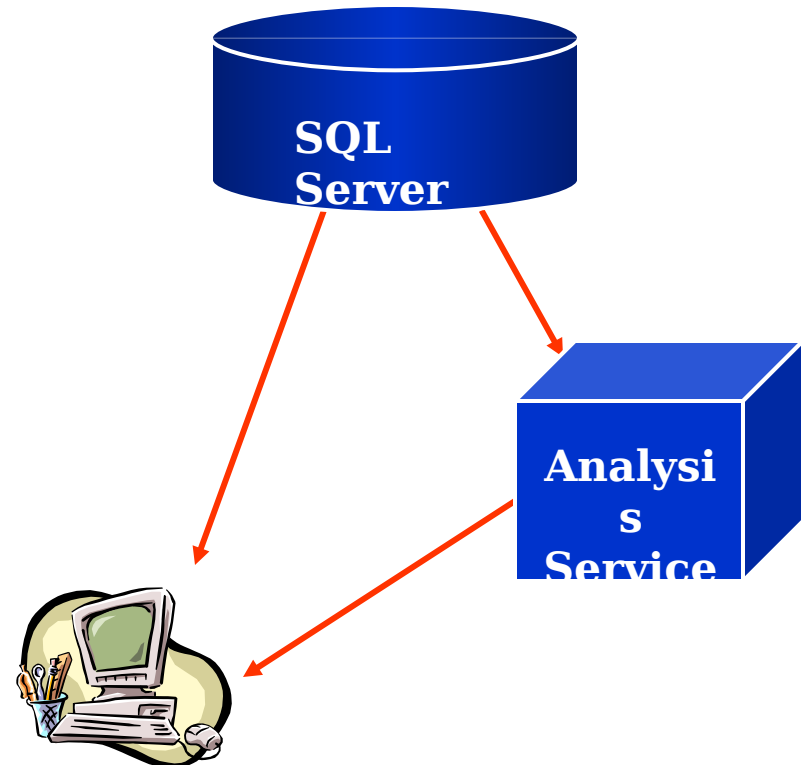
SQL Server

Analysis Service

System Characteristics

- Accessible through various front ends (EXCEL, SPSS, Business Objects).

- Accessible through various connective technologies (ODBC, OLE, Web).

- Accessible at different levels.

  - Access primitive data elements (raw data).

  - Access multi dimensional data (data cubes).

User Base

- Researchers
  - Raw data (SPSS, SAS).
  - Multi-dimensional data cubes (EXCEL).
- Analysts
  - Raw data.
  - Multi-dimensional data cubes.
- Decision Makers
  - Summarized reports (Business Objects).

Continuing Work

- Develop metrics for Officer community.

- Identify relevant Officer data elements.

- Develop logical data map.

Continuing Challenges

- In the area of metrics:

  - What do you measure?

  - What level (individuals, organizations)?

  - Why do you measure (policy evaluation, organizational performance)?

Continuing Challenges

- In the area of process:
  - Who gets access to what?
    - Individual/organizational privacy
  - How to maintain currency of system?
  - How to maintain visibility of system?
  - How to manage revisions in reports due to system delays?

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 QUESTIONS?